



Sitewide Building Emergency Plan for the Ernest Orlando Lawrence Berkeley National Laboratory

LBNL/PUB-540 Rev
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Contents

1. Introduction and Policy	4
2. Hazard Awareness	4
3. Emergency Preparedness Program	5
a. Localized Emergency vs. Region-wide Disasters	5
b. Emergency Response Organization	5
c. Communications	5
d. Supplies and Equipment	6
e. Training	6
f. Support to Building Emergency Teams	6
g. Employee Responsibilities Before/During and Emergency	7
h. Emergency Information for Employees	7
i. Reporting an Emergency.....	7
j. Fire Alarm Call Boxes	7
4. Building Emergency Teams	7
a. Team Titles and Assignments	7
b. Team Command and Control	8
c. Team Functions and Responsibilities	8

Appendices

Appendix A. Responsibilities of BET Leader	9
Appendix B. Responsibilities of Team Members	10

1. Introduction and Policy

The purpose of this plan is to provide information to Building Emergency Teams to prepare them to respond to emergencies in or near their building(s).

During all emergencies, it is necessary that an organized effort be made to protect personnel from injury and minimize damage to property and the environment. All Laboratory resources can be made available to respond to an emergency.

It is the responsibility of each Laboratory Division to administer this Building Emergency Plan for all buildings that they occupy, through the efforts of the Building Manager appointed to each building. The Building Manager Policy & Procedure outlines divisional authority for Building Management, including emergency preparedness.

Berkeley Lab's Master Emergency Plan provides a detailed description of the Emergency Management Program and includes information on the emergency response organization. References that support this Building Emergency Plan and the Master Emergency Plan are:

- LBNL Pub 533, Master Emergency Plan (*and all references and standards applied therein*)
- LBNL Pub 542 Building Management Policy and Procedures for Emergency Preparedness and Facility Coordination for the Ernest Orlando Lawrence Berkeley National Laboratory
- LBNL PUB-3000 Chapters 1, 2, 9, 23, and 24
- LBNL Urban-Wildland Fire Plan, PUB-535
- LBNL Emergency Response Guide (red/white wall hanging) (4/99)
- LBNL Emergency Preparedness Employee Pocket Guide (9/02)
- Security at Berkeley Lab (tri-fold brochure) (08/02)

2. Hazard Awareness

Berkeley Lab is situated in the East Bay hills of the San Francisco Bay Area. A detailed hazard analysis is located in the Master Emergency Plan.

Because of its location, the Laboratory faces two major natural hazards: earthquakes and urban-wildland fires (firestorms). As a research facility, Berkeley Lab contains materials that can pose a danger to personnel if spilled or accidentally released.

In addition, LBNL prepares for any event that could impact its mission, examples include power outages, terrorism and workplace violence.

Day-to-day and more localized emergencies may also require employees reporting to professional responders, building evacuations, and other self-help responses by the building

emergency team. These emergencies may include injuries, fire alarm(s) and short-term power outage or utility failures.

3. Emergency Preparedness Program

A. Localized Emergencies vs Region-wide Disasters

When applying this program, it is important to distinguish between a localized emergency (i.e., a hazardous spill or an employee injury), and a region-wide disaster like an earthquake.

For isolated events within the Berkeley Lab, the emergency response will involve internal professional responders, ie: the Fire Department, EH&S, and Security/Police services. Larger, but still localized events would require assistance from outside responders. A much more regional disaster (ie: large earthquake) would overwhelm even professional responders and require participation in a regional-wide response.

B. Emergency Response Organization

LBNL has a tiered system for response, with four layers of control.

1. The **LBNL Initial Assessment Team (IAT)** is a small group of knowledgeable employees with immediate communication ability who would be notified first of any significant event at the Lab. The purpose of the IAT is to gather and assess the initial information ; and then direct and control the initial response.
2. If the decision is made to activate the **Emergency Operations Center (EOC)** at Building 48, that team would assume primary control of the Labwide response. Members of the EOC are pre-designated and pre-trained to receive information, evaluate, prioritize, coordinate response to emergencies, and plan recovery activities.
3. Answering to the EOC are **Professional Responders** which includes Security, EH&S, and Facilities staff from on-site; and the UC Berkeley Police Department and Alameda County Fire Department from off-site.
4. The basic level of response are the approximately 50 **Building Emergency Teams (BETs)** assigned and trained for self-help response to Lab personnel, including evacuation, assembly, triage, first aid, and communication. BET's also assist arriving Professional responders. Sharing this level are other **Auxiliary Teams**, including the Damage Assessment Team (Facilities/Engineering), First Aid Team (Health Services), and amateur (HAM) radio operation.

C. Communications

Each BET leader is issued a radio handset and charger, enabling all building teams to contact the EOC, report emergency conditions, and receive instructions. This radio network (and Public Address system) is tested monthly. Repair and maintenance of these systems is conducted by Laboratory communications technicians.

The BET radio system is not monitored on a regular basis, only during a significant event. However, the radio network is available for BET members to communicate with each other at all times.

D. Supplies and Equipment

The EH&S Division procures and maintains resources necessary for preparation and response to emergencies. The EOC and professional response groups are outfitted with their own equipment. An emergency supply of water and food is on hand to serve staff that would remain at the Laboratory for extended periods for rescue and recovery.

Each BET member is supplied with a hard hat and flashlight. Team leaders are also given a bullhorn and handheld radio. Each building has several first aid kits for treatment of victims. Onsite staff (and some off-site buildings) also have access to emergency rescue boxes located outdoors throughout the Laboratory, which contain first aid kits, search and rescue equipment, flashlights, emergency water, tools, and other items. **Any person with an emergency need may gain access to these rescue boxes.**

E. Training

Completion of required training is the responsibility of each BET member and their division management. Training is recorded in the Laboratory training database by the EH&S Division.

Required training for all BET members **within 6 months of their assignment** includes:

- EHS 116 First aid (renewed every three years)
- EHS 530 Fire Extinguisher Training (renewed annually)
- EHS 154 Building Emergency Team Training (recommend retaking every three years)

Training that is not required but strongly recommended include:

- EHS 123 Adult CPR (renewed every two years)
- EHS 135 Earthquake/Wildland Fire Safety (recommend retaking every three years)
- EHS 155 Building Emergency Team Seminars (offered quarterly)

In addition, it is recommended that BET members view the following videos in preparation for their emergency team duties, and once every two years following. These are available as either streaming video through the Emergency Preparedness website, or as videocassettes through the Emergency Preparedness office.

- “How to Use a Rescue Box”
- “Firestorm Evacuation”
- “Earthquake Exercise”

F. Support to Building Emergency Teams

The Emergency Preparedness Program Manager provides support and guidance for BET teams including but not limited to policies and procedures, communications resources, supplies and equipment, and training, drill and exercise coordination.

G. Employee Responsibilities Before and During an Emergency

As indicated in EHS Publication 3000, Chapter 9, each employee and supervisor at LBNL has responsibilities before and during an emergency. These include:

Knowing the identity of the Building Emergency Team leader and members in charge of the floor where he or she works.

- Know their evacuation routes and assembly areas.
- Know the location of fire alarm pull stations, fire extinguishers and first aid kits.
- In addition, each supervisor must:
- Ensure that employees assigned to the building emergency team complete required training and attend team meetings.
- Promote employee response to specific emergency situations as detailed in EHS Pub 3000, Chapter 9, and in the pamphlet: "LBNL Employee Preparedness Employee Pocket Guide" (9/02)

H. Emergency Information for Employees

If a disaster occurs during other than normal working hours and you are off site, you may dial the Laboratory's emergency status information number to listen to a recorded message, which will provide you with information regarding the Laboratory's status. To obtain emergency status information, **dial 1-800-445-5830**.

I. Reporting an Emergency

To report all types of emergencies, call the emergency number on your telephone. Generally, from an LBNL phone, dial 7911. From all other phones dial 9911 (if so indicated). If using any other telephone, dial 911. When reporting an emergency, it is important to identify yourself and be as specific as possible.

J. Fire Alarm Call Boxes

Pulling the handle of a fire alarm call box (or breaking its glass, depending on design) will initiate fire alarm bells/claxons in the immediate building and automatically alarm at the Laboratory Dispatch office (or nearest Fire Department, if off site). If you witness a serious injury (no fire) and cannot find a phone or leave the injured, then you may activate the nearest alarm call box to summon help.

4. Building Emergency Teams

a) Team Titles and Assignments

The Building Emergency Team consists of the Team Leader (often the Building Manager or designated by the Building Manager), and Team Members. Rosters of every current team are available at the Emergency Preparedness website, or from the Emergency

Preparedness Program Manager. Team members are volunteers, are recommended by the Team Leader, and assigned by divisions that occupy each building.

b) Team Command and Control

The Team Leader is in charge during emergency situations. In his or her absence, another designated emergency team member assumes those duties. Each Team Member acts as liaison between the BET Leader and personnel on his or her floor or area. The discoverer of an incident is in charge of the scene until relieved of the responsibility by an emergency team member or professional responder.

c) Team Functions and Responsibilities

Building Emergency Team functions include:

- Coordination of building evacuations and search procedures
- Control of assembly areas
- Search and rescue procedures (under supervision of Professional responders)
- Immediate and initial first aid treatment of employees
- Assistance to professional responders
- Communication with the Emergency Operations Center (EOC)
- Maintenance and control of emergency equipment
- Emergency utility shutdown procedures (as applicable)
- Control of building re-entry

Appendix A.

Responsibilities of the Building Emergency Team Leader

Under the guidance of the LBNL Emergency Preparedness Program Manager, the BET Leader assumes a lead role in the building's emergency preparedness program. Responsibilities include:

- Assist with the preparation and updating of the emergency evacuation and egress plans for the building or complex.
- Recommend personnel for appointment as team members.
- Identify vacancies on the emergency team and request the appropriate division provide members.
- Notify the EP Program Manager of changes to the team list.
- Complete required training courses. Provide information to BET members on the availability of required training. Encourage team members to attend nonrequired training and updates. When appropriate, coordinate special training for the team.
- Establish team search procedures and assignments, re-entry prevention, and assembly area control.
- If utility-related hazards exist during an emergency, implement shutdown of utilities (gas, water, electricity) if it can be performed safely. Receive orientation for utility shutoff procedures from Facilities staff and coordinate same with team members. Coordinate orientation for emergency team. **Note:** Do not restart utilities.
- Participate in the monthly Building Manager radio and PA tests. Report radio and PA malfunctions to the EP Program Manager.
- Maintain emergency equipment and supplies, such as radio, bullhorn, flashlight, and hard hat. Ensure that all team members are equipped with a hard hat and flashlight.
- Ensure that each first aid kit is assigned to a team member as a First Aid Kit Custodian.
- After emergencies, drills, and exercises, assist the EP Program Manager with a critique and short report on the effectiveness of the emergency response
- Respond to emergencies in accordance with this Building Emergency Plan.

Appendix B.

Responsibilities of Building Emergency Team Members

BET team members closely coordinate Laboratory staff during evacuations and emergency treatment. Responsibilities include:

- Take directions from the Building Manager/Team Leader or Deputy during emergencies.
- Upon assignment, familiarize yourself with your assigned floor/area for evacuation objectives.
- Familiarize staff and supervisors of assigned area with your role, and request their support in the event of an emergency.
- Familiarize yourself with employees who have physical disabilities, and prepare associated staff with a plan for evacuating these individuals.
- Periodically inspect your assigned area to identify and eliminate hazards. Prevent blockages of hallways, doorways, exits, and other points of egress.
- Complete required training courses, and encourage attendance for building occupants.
- Familiarize yourself with locations of fire extinguishers, fire alarm call boxes, first aid kits, and other emergency equipment on your floor. Also become familiar with building utility shutoff locations.
- Search and evacuate all unlocked rooms in your assigned floor or area. For locked doors, knock and loudly announce an evacuation. Direct evacuating staff through established evacuation routes and stairwells.
- Report to the Team Leader any and all observed hazards, remaining trapped or injured staff, locked doors, and potential damage.
- Assist the Team Leader as directed.
- After an emergency, provide input to the Team Leader on deficiencies in the response and recommended improvements.